Vol. 118 THERMOCHIMICA ACTA August 15th, 1987

CONTENTS

(Abstracted/Indexed in: Curr. Contents: Phys., Chem. Earth Sci.; Eng., Technol. Appl. Sci., Chem. Abstr.)

$V_9Mo_6O_{40}$ and phase equilibria in the system $V_9Mo_6O_{40}$–Fe_2O_3
J. Walczak, M. Kurzawa and P. Tabero (Szczecin, Poland) 1
Differential scanning calorimetry probes acidity strength distribution in catalytic materials
A.K. Aboul-Gheit, M.A. Al-Hajjaji and A.M. Summan (Makkah Al-Mukarramah, Saudi Arabia) 9
Use of modified Martin equation for unsaturated vapour and liquid states
R.K. Agarwal, A. Chakma and J. Lielmezs (Vancouver, B.C., Canada) 17
FTIR and high-resolution photoluminescence studies of the thermal decomposition of crystalline europium hydroxide
H.G. Brittain (New Brunswick, NJ, U.S.A.) and J.V. Posluszny (Ramsey, NJ, U.S.A.) 25
Phases and thermal decomposition characteristics of hydro-sodalites $Na_{6+x}[AlSiO_4]_6(OH)_x \cdot nH_2O$
J. Felsche and S. Luger (Konstanz, F.R.G.) 35
Thermal stability of CuO–Al_2O_3 system doped with sodium
M.M. Selim and N.A. Youssef (Cairo, Egypt) 57
Some problems concerning the mathematical theory of non-isothermal kinetics. II. Primary isothermal differential kinetic equations (PIDKEs)
E. Urbanovici and E. Segal (Bucharest, Romania) 65
Measuring energy–entropy competition and compensation in chemical reactions: a theoretical study of the role of entropy in the formation of van der Waals complexes
Z. Slanina (Sapporo, Japan) 79
A study of rapid redox initiation by reaction calorimetry
L. Jansson, H. Nilsson, C. Silvegren and B. Törnell (Lund, Sweden) 97
Chemical stability of arsenates of uranium with a valency lower than six, with emphasis on uranium(V) arsenic oxide $UAsO_5$
H. Barten (Petten, The Netherlands) 107
Thermogravimetric analysis of polythiocarbonates: thermal decomposition temperatures and kinetic parameters
L.H. Tagle, F.R. Diaz and L. Rivera (Santiago, Chile) 111
Thermal study of $NiC_2O_4 \cdot 2H_2O$ obtained by a solid state reaction at room temperature and normal pressure
M.E. García-Clavel, M.J. Martínez-Lope and M.T. Casais-Alvarez (Madrid, Spain) 123
Lithium carbonate enhancement of the calcination of calcium carbonate: proposed extended-shell model
J.-M. Huang and K.E. Daugherty (Denton, TX, U.S.A.) 135
Hydration of dicalcium silicate in the presence of concrete admixtures
A.S. Taha, S.A.S. El-Hemaly, F.H. Mosalamy and A.F. Galal (Cairo, Egypt) 143
Solid–solid interactions between ferric oxide and lithium carbonate and the thermal stability of the lithium ferrites produced
G.A. El-Shobaky and A.A. Ibrahim (Cairo, Egypt) 151
A comparative study of the kinetic and thermodynamic approaches to the glass transition phenomenon in high polymers
C.T. Vijayakumar and H. Kothandaraman (Madras, India) 159
Heat capacity evolution in calorimeters with temperature programming simulated by an RC model
J. Font, J. Muntasell, J. Navarro, J.Ll. Tamarit (Barcelona, Spain) and E. Cesari (Palma de Mallorca, Spain) 183
Deamination of tris(ethylenediamine)nickel(II) chloride and tris(ethylenediamine)platinum(IV) chloride
J.E. House, Jr. and F.M. Tahir (Normal, IL, U.S.A.) 191
Capacités calorifiques de composés modeles de polymères synthétisés à partir de durcisseurs aminés et de résine époxyde
C. Lesbats et A. Lichanot (Pau, France) 199

(Continued on p. 3 of cover)

(*Contents continued*)

Potassium nitrosodisulphonate (Fremy's salt) as a new redox thermometric titrant
A. Morante, R. Forteza and V. Cerdá (Palma de Mallorca, Spain) 215
Supercooling phenomena in electrolytic mixtures of 2-ketobutyramide
G. Gioia Lobbia and G. Berchiesi (Camerino, Italy) 223
Kinetics of solid state decomposition of $K_2[V_2O_3(O_2)_2F_2]$: a TG study
J.K. Ghosh and G.V. Jere (New Delhi, India) 229
Correlation of the spectroscopic and thermodynamic properties of solutions of ethanol with non-associating components by means of the UNIQUAC associated-solution model
I. Nagata and K. Miyazaki (Kanazawa, Japan) 237
Thermal studies of heavy metal carboxylates. III. Metal dodecanoate–carboxylic acid mixtures
A.B. Seddon and J.A. Wood (Huddersfield, Gt. Britain) 253
An analysis of the Reich and Stivala algorithm for determining the reaction mechanism from TG data
J.E. House, Jr., R.J. Webb, K.A. Kemper and H.M. Fogel (Normal, IL, U.S.A.) 261
Décomposition thermique de fluorapatites carbonatées de type B "inverses"
I. Khattech et M. Jemal (Tunis, Tunisia) 267
Thermodynamic study of molecular interactions in ternary liquid systems
B.L. Marwein and S.N. Bhat (Shillong, India) 277
Crystalline solid to plastic crystal transitions in pentaglycerine–neopentylglycol mixtures
J. Font, J. Muntasell, J. Navarro and J.Ll. Tamarit (Barcelona, Spain) 287
Thermal behaviour of intercalated kaolinite
P. Sidheswaran, P. Ganguli and A.N. Bhat (Bombay, India) 295

Notes

Thermogravimetric and differential scanning calorimetry studies of hydrated lanthanide perrhenate complexes with *trans*-1,4-dithiane-1,4-dioxide
G. Vicentini, L.B. Zinner and P.O. Dunstan (São Paulo, Brazil) 305
Non-isothermal decomposition kinetics of a mononuclear coordination compound of Fe(II)
E. Urbanovici, E. Segal, M. Andruh and M. Brezeanu (Bucharest, Romania) 309

Author Index 313

Subject Index 314

GENERAL INFORMATION

Submission of articles: Manuscripts should be submitted to Prof. W.W. Wendlandt, Department of Chemistry, University of Houston, Cullen Boulevard, Houston, Texas 77004, U.S.A. A notice to authors may be obtained through the Editor-in-chief or the publisher.
Submission of an article is understood to imply that the article is original and unpublished and is not being considered for publication elsewhere.
Upon acceptance of an article by the journal, the author(s) will be asked to transfer the copyright of the article to the publisher. The transfer will ensure the widest possible dissemination of information.

Languages: Papers in English, French or German will be accepted, but English is preferred. When normal-length papers are written in French or German, an English abstract should be added. A Résumé or Zusammenfassung, in the same language as the paper itself, should also be added.

Reprints: A total of 50 reprints of each paper will be provided free of charge to the author. Additional copies can be ordered at prices shown on the reprint order form which will accompany the proofs.

Customers in the U.S.A. and Canada who wish to obtain information on this and other Elsevier journals, can contact the Journal Information Center, Elsevier Science Publishing Co. Inc., 52 Vanderbilt Avenue, New York, NY 10017, U.S.A., Tel: (212) 916 1250.

Subscriptions should be sent to:

ELSEVIER SCIENCE PUBLISHERS B.V.,
Journals Department, P.O. Box 211, 1000 AE Amsterdam, The Netherlands, Tel: 5803 911, Telex: 18582